WHAT IS CLAIMED IS:

1. In a wheel balancer, the improvement comprising:

a shaft adapted for receiving a wheel/tire assembly, said shaft having a longitudinal axis and being rotatable about said axis so as to rotate a wheel/tire assembly removably mounted thereon;

a motor operatively connected to the shaft for rotating said shaft about its longitudinal axis, thereby rotating the wheel/tire assembly;

a load roller for applying a generally radial force to the wheel/tire assembly during rotation of said wheel/tire assembly so that loaded wheel/tire assembly measurements may be determined while the force is applied thereto;

a control circuit responsive at least to the loaded wheel/tire assembly measurements and to a tire stiffness value to make a determination of a predetermined uniformity parameter.

2. The wheel balancer as set forth in claim 1 wherein the tire stiffness value is provided by a measuring device separate from but electrically connected to the balancer.

3. The wheel balancer as set forth in claim 1 wherein the tire stiffness value is provided by a suspension tester.

4. The wheel balancer as set forth in claim 1 wherein the tire stiffness value is provided by a manually operable input device which the user may operate to input a tire stiffness value.

5. The wheel balancer as set forth in claim 4 further including a stored database of tire stiffness data, said manually operable input device being actuable by an operator to select the desired tire stiffness value from said database.

6. The wheel balancer as set forth in claim 1 wherein the tire stiffness value is determined by the control circuit from the change in position of the load roller resulting when forces of different magnitudes are applied to the wheel/tire assembly by the load roller.

7. The wheel balancer as set forth in claim 1 wherein said control circuit is responsive to a tire parameter to adjust the force applied by the load roller.

8. The wheel balancer as set forth in claim 1 wherein the loaded wheel/tire assembly measurements are measurements of loaded radial runout or variation in radial force.

9. The wheel balancer as set forth in claim 1 including stored wheel/tire assembly uniformity specifications, the control circuit being programmed to display a message to the operator if measured uniformity is outside of the specifications.

10. The wheel balancer as set forth in claim 1 further including a feedback sensor to measure the force generated by the load roller.

11. The wheel balancer as set forth in claim 1 wherein the predetermined uniformity parameter is force variation.

12. The wheel balancer as set forth in claim 1 wherein the control circuit determines correction weight magnitudes and positions for correcting the effect of the predetermined uniformity parameter.

13. The wheel balancer as set forth in claim 1 further including a sensor for measuring the runout of the wheel rim of the wheel/tire assembly at the bead seat, said control circuit being responsive to the measurements of wheel rim runout, and responsive to the measured loaded radial runout of the wheel/tire assembly to

determine an angular remount position of the tire on the rim to minimize a predetermined uniformity parameter of the tire or wheel/tire assembly.

14. The wheel balancer as set forth in claim 13 further including a display to indicate to the user said angular remount position of the tire with respect to the rim.

15. The wheel balancer as set forth in claim 14 wherein the control circuit controls the display to indicate the value the uniformity parameter would have if the tire were mounted to the rim at said angular remount position.

16. The wheel balancer as set forth in claim 1 wherein the load roller is adapted to move radially during the determination of loaded runout.

17. In a wheel balancer having a shaft adapted for receiving a wheel/tire assembly, said shaft having a longitudinal axis and being rotatable about said axis so as to rotate a wheel/tire assembly removably mounted thereon, a motor operatively connected to the shaft for rotating said shaft about its longitudinal axis, thereby rotating the wheel/tire assembly, and a load roller for applying a generally radial force to the wheel/tire assembly during rotation of said wheel/tire assembly, a method comprising:

determining the loaded wheel/tire assembly measurements while the force is applied to the wheel/tire assembly;

providing a tire stiffness value for the wheel/tire assembly;

determining a predetermined uniformity parameter of the tire or wheel/tire assembly at least in part from the loaded wheel/tire assembly measurements and the tire stiffness value.

18. The method as set forth in claim 17 wherein the tire stiffness value is provided by a measuring device separate from but electrically connected to the balancer.

19. The method as set forth in claim 17 wherein the tire stiffness value is provided by a suspension tester.

20. The method as set forth in claim 17 wherein the tire stiffness value is provided by a manually operable input device operated by the user.

21. The method as set forth in claim 20 further including a stored database of tire stiffness data, said manually operable input device being actuable by an operator to select the desired tire stiffness value from said database.

22. The wheel balancer as set forth in claim 17 wherein the tire stiffness value is determined from the change in position of the load roller resulting when forces of different magnitudes are applied to the wheel/tire assembly by the load roller.

23. The method as set forth in claim 17 wherein a control circuit output is adjusted in response to a tire uniformity parameter.

24. The method as set forth in claim 17 including measuring wheel/tire assembly uniformity and comparing stored wheel/tire assembly uniformity specifications with measured uniformity.

25. The method as set forth in claim 17 further including measuring the force generated by the load roller.

26. The method as set forth in claim 17 including the step of determining correction weight magnitudes and positions for correcting the determined imbalance.

27. The method as set forth in claim 17 further including measuring the runout of the wheel rim of the wheel/tire assembly at the bead seat, and determining an angular remount position of the tire on the rim to minimize some predetermined uniformity parameter of the wheel/tire assembly.

28. The method as set forth in claim 27 further including indicating to the user said angular remount position of the tire with respect to the rim.

29. The method as set forth in claim 27 further including displaying to the user the value the uniformity parameter would have if the tire were mounted to the rim at said angular remount position.

30. The method as set forth in claim 17 wherein the load roller is adapted to move radially during the determination of loaded wheel/tire assembly measurements.